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ASSIGNMENT BOOKLET

MAT1038 Applied Mathematics 10
Module 4

FOR STUDENT USE ONLY

Date Assignment Submitted: ____________________

Time Spent on Assignment: ____________________

(If label is missing or incorrect)

Student File Number: ____________________

Module Number: __________

FOR OFFICE USE ONLY

Assigned Teacher: __________

Assignment Grading: __________

Graded by: __________

Date Assignment Received:

Student's Questions and Comments

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Please verify that preprinted label is for correct course and module.

Teacher's Comments

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Teacher

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- Is the booklet cover filled out and the correct module label attached?

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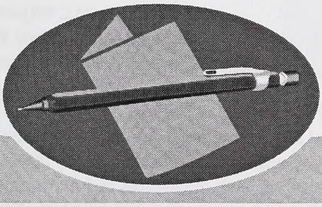
Applied Mathematics 10

Module 4

Line Segments

ASSIGNMENT BOOKLET



Learning
Technologies
Branch

Alberta
LEARNING

FOR TEACHER'S USE ONLY

Summary

Total Possible Marks	Your Mark
50	

Teacher's Comments

Applied Mathematics 10
Module 4: Line Segments
Assignment Booklet
Learning Technologies Branch
ISBN 0-7741-2162-9

This document is intended for	
Students	✓
Teachers	✓
Administrators	
Home Instructors	
General Public	
Other	

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ASSIGNMENT BOOKLET
APPLIED MATHEMATICS 10 – MODULE 4: LINE SEGMENTS

Your mark on this module will be determined by how well you do on the assignment in this Assignment Booklet and the module project in the Project Booklet.

The value of each part of the module assignment is stated in the left margin of this booklet. The total value of the module assignment is 50 marks.

(50)

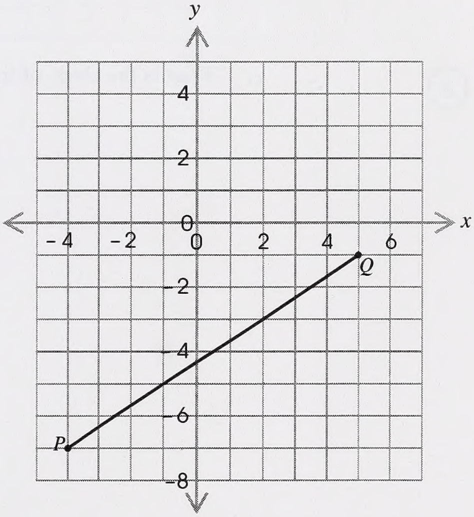
Module Assignment

Read all parts of this booklet carefully and record your answers in the appropriate places. Work slowly and carefully. If you are having difficulties, go back and review the appropriate activity in the Student Module Booklet.

Be sure to complete all parts of the assignment and proofread your responses before you submit this assignment to your teacher for grading.

1. Two points on a coordinate plane are $P(-4,-7)$ and $Q(5,-1)$.

Answer the following questions. Show your work.



③ **a.** What is the length of line segment PQ?

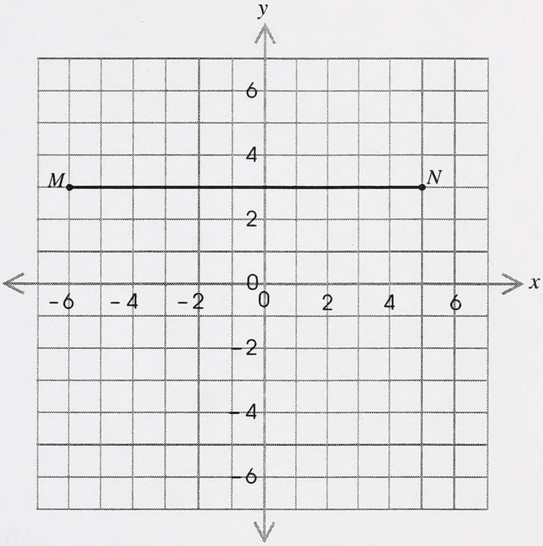
③ **b.** What is the midpoint of line segment *PQ*?

③ **c.** What is the slope of line segment *PQ*?

2. Two points on a coordinate plane are $M(-6, 3)$ and $N(5, 3)$.

Answer the following questions. Show your work.

③ **a.** What is the length of line segment *MN*?



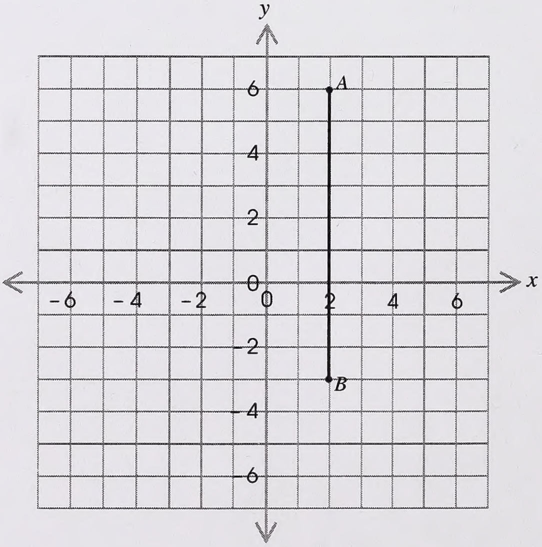
③ **b.** What is the midpoint of line segment *MN*?

③ **c.** What is the slope of line segment *MN*?

3. Two points on a coordinate plane are $A(2, 6)$ and $B(2, -3)$.

Answer the following questions. Show your work.

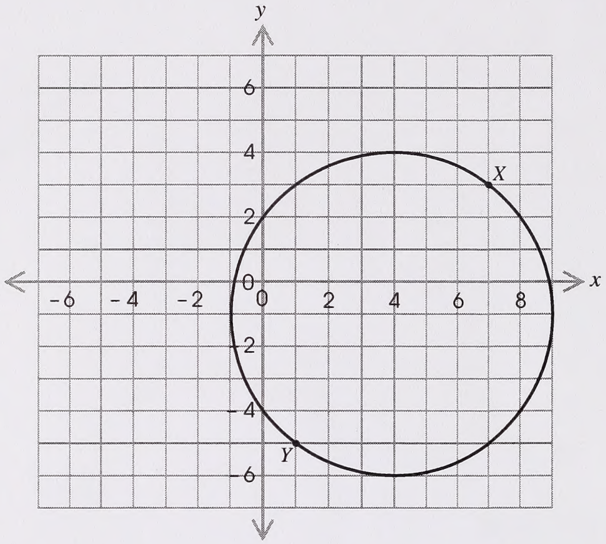
③ **a.** What is the length of line segment *AB*?



③ **b.** What is the midpoint of line segment *AB*?

③ **c.** What is the slope of line segment *AB*?

4. A circle is drawn on a coordinate plane as shown in the following graph. The endpoints of a diameter are $X(7, 3)$ and $Y(1, -5)$.



Answer the following questions. Show your work.

③ **a.** What are the coordinates of the centre of the circle?

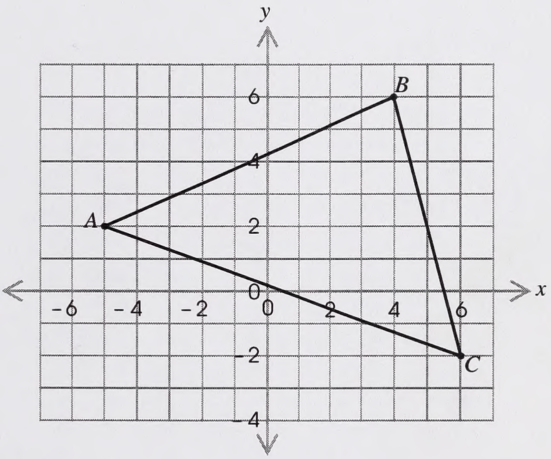
③ **b.** What is the length of the radius?

5. A line segment *AB* has a slope of $\frac{4}{5}$.

① **a.** What is the slope of a line segment parallel to line segment *AB*?

① **b.** What is the slope of a line segment perpendicular to line segment *AB*?

⑤ **6.** Triangle *ABC* has points $A(-5, 2)$, $B(4, 6)$, and $C(6, -2)$. Is ΔABC a right triangle? Explain.



⑩ **7.** Turn to page 229 of the textbook and read the introductory paragraphs of exercise 12 of “Exercises: Extending Your Thinking.” Next, turn to page 249 of the textbook and answer exercises 1 to 4 of Part A of “What Should I Be Able To Do?” (**Note:** You may choose to measure a staircase in your home.)

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